

IN THE CLAIMS:

Claim 1 (currently amended): A method of reducing the nicotine content of a tobacco plant, said method comprising:

applying to the tobacco plant an effective amount of ~~a nicotine reducing agent~~ glucose oxidase sufficient to inhibit the synthesis of nicotine in the tobacco plant so that the resulting nicotine content in the plant treated with the nicotine reducing agent will yield a non-addictive level of nicotine in the central nervous system blood plasma of the user.

Claim 2 (original): The method of claim 1 comprising treating the tobacco plant in situ.

Claims 3 and 4 (canceled without prejudice).

Claim 5 (currently amended): The method of claim [4] 1 wherein the glucose oxidase is produced by a tobacco plant herbivore.

Claim 6 (original): The method of claim 5 wherein the tobacco plant herbivore is *Helicoverpa zea*.

Claim 7 (currently amended): The method of claim [4] 1 wherein the ~~nicotine reducing agent~~ glucose oxidase is biochemically produced.

Claim 8 (currently amended): The method of claim 1 comprising applying to the tobacco plant ~~a nicotine-reducing~~ the glucose oxidase as a composition comprising an effective amount of ~~a nicotine-reducing agent~~ the glucose oxidase and a carrier.

Claim 9 (original): The method of claim 8 wherein the composition is selected from an aqueous solution and a salivary extract of a tobacco plant herbivore.

Claim 10 (currently amended): The method of claim 8 wherein the effective amount of the ~~nicotine-reducing agent~~ glucose oxidase is in the range of 2 to 200 grams per 55 gallons of the ~~nicotine-reducing~~ composition.

Claim 11 (currently amended): The method of claim 10 wherein the effective amount of the ~~nicotine-reducing agent~~ glucose oxidase is 20 to 100 grams per 55 gallons of the ~~nicotine-reducing~~ composition.

Claim 12 (original): The method of claim 1 wherein the non-addictive nicotine level of nicotine is less than 25 ng/ml in central nervous system blood plasma.

Claim 13 (currently amended): The method of claim ~~3~~ 1 wherein the non-addictive level of nicotine is less than 5 ng/ml in central nervous system blood plasma.

Claim 14 (original): The method of claim 1 wherein the tobacco plant is selected from the group consisting of *Nicotiana tabacum*, *Nicotiana rustica* and *Nicotiana glutinosa*.

Claim 15 (original): The method of claim 1 wherein the tobacco plant is a genetically modified plant, exhibiting a reduced level of nicotine as compared to non-genetically modified tobacco plants.

Claim 16 (currently amended): The method of claim 1 comprising applying the ~~nicotine-reducing agent~~ glucose oxidase directly to an exterior of a portion of the tobacco plant.

Claim 17 (currently amended): The method of claim 1 further comprising damaging the tobacco plant prior to applying the ~~nicotine-reducing agent~~ glucose oxidase.

Claim 18 (currently amended): The method of claim 1 comprising applying to the tobacco plant a tobacco plant herbivore and generating conditions on said tobacco plant which result in the tobacco plant herbivore emitting onto the tobacco plant the ~~nicotine-reducing agent~~ glucose oxidase.

Claim 19 (original): The method of claim 18 wherein the tobacco plant herbivore is *Helicoverpa zea*.

Claim 20 (currently amended): The method of claim 1 further comprising repeating the administration of the ~~nicotine-reducing agent~~ glucose oxidase to sequentially lower the level of nicotine to the non-addictive level.

Claim 21 (original): A tobacco plant treated in accordance with the method of claim 1.

Claim 22 (currently amended): Tobacco plant leaves treated with an effective amount of glucose oxidase having a nicotine content such that a tobacco product produced from the tobacco plant leaves will yield a non-addictive level of nicotine in the central nervous system blood plasma of the user.

Claim 23 (original): The tobacco plant leaves of claim 22 wherein the non-addictive level of nicotine is less than 25 ng/ml in the central nervous system blood plasma.

Claim 24 (original): The tobacco plant leaves of claim 22 wherein the non-addictive level of nicotine is less than about 5 ng/ml in the central nervous system blood plasma.

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Claim 25 (original): The tobacco plant leaves of claim 22 is selected from the group consisting of *Nicotiana tabacum*, *Nicotiana rustica* and *Nicotiana glutinosa*.